

Claims

WHAT IS CLAIMED IS:

1. In a computer system, a method for generating an XML payload from an XML list and
5 independent of a schema associated with the XML list, the method comprising:
grouping paths indicative of parent/child relationships of data for each record in the XML
list according to the path length;
traversing each path for a record in an XML payload node tree; and
creating nodes to extend a branch from a current end node to a new end node in the XML
10 payload node tree associated with a record in the node tree if the act of traversing a
path does not find a node in the branch for each parent/child relationship in the
path.
2. The method of claim 1 further comprising:
15 resetting a pointer from pointing to the current end node to pointing to the new end node
whereby the new end node becomes the current end node.
3. The method of claim 2 further comprising:
testing for more paths in the record; and
20 and if there are more paths, repeating the act of traversing and the act of creating for the
next path in record.
4. The method of claim 1 further comprising:

if the act of traversing does find all nodes in the branch to a current end node in the

branch, property testing to detect whether the properties of the current end node in

the branch match the properties of an end node in the path being traversed; and

if the properties of the current end node in the path do not match the properties of the end

5 node in the path being traversed, the act of creating also creating new nodes for the
nodes having different properties to extend the branch to a new end node from the
current end node.

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5. The method of claim 4 further comprising:

resetting a pointer from pointing to the current end node to pointing to the new end node

whereby the new end node becomes the current end node.

testing for more paths in the record; and

15 and if there are more paths, repeating the acts of traversing, creating, and property testing
for the next path in record.

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6. An XML payload generating system in a computing system for generating a schemaless

XML payload from an XML list, the XML payload generating system comprising:

load module for collecting all the parent/child paths in the XML list;

a node tree create module for creating an XML payload node tree from the XML list

- 5 based on the parent/child paths in the XML list;

said node tree create module using a parent/child path as a guide and traversing a path in

an XML payload node tree being created and adding a node in the node tree for

each parent/child relationship in the path that does not have a node in the node

tree.

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7. The system of claim 6 further comprising:

a build module for building an XML payload from the XML payload node tree; and

an export module for exporting the XML payload to a software application.

- 15 8. The system of claim 6 wherein:

said node tree create module testing whether the properties of a current end node in the

node tree match the properties of an end node in the path being traversed; and

if the properties of the current end node in the path do not match the properties of the end

node in the path being traversed, said node tree module creating new nodes for the

- 20 nodes having different properties to extend the node tree to a new end node from

the current end node.

9. The system of claim 8 further comprising:

said node tree create module resetting a pointer from pointing to the current end node to pointing to the new end node whereby the next path being traversed against the node tree will be traversed starting with respect to the new end node.

- 5 10. The system of claim 9 further comprising:
- a build module for building an XML payload from the XML payload node tree; and
- an export module for exporting the XML payload to a software application.
11. The system of claim 9 further comprising:
- 10 a build module for building an XML payload from the XML payload node tree; and
- an export module for exporting the XML payload as a web component to a web page.

12. A computer readable medium for storing computer instructions for a computer process for generating an XML payload from an XML list for multi-dimensional data independent of the schema of the data, the computer process comprising:

grouping all of the paths in a record of the XML list according to their parent/child
5 relationships;
traversing the parent/child relationship of the current shortest path in the record;
creating nodes in a node tree representative of the parent/child relationship if nodes for
parent child relationships in the current shortest path are missing; and
repeating the above acts until all paths for the record have associated nodes in the branch
10 of the node tree for the record.

13. The computer readable medium of claim 12 wherein the computer process further comprises:

testing whether there is another record in the XML list; and
15 if there is another record, repeating all the acts of claim 12 for next record.

14. The computer readable medium of claim 12 wherein the computer process further comprises:

if nodes do exist for parent child relationships in the current shortest path, testing
20 properties of a current end node in a branch of the node tree against properties of
end node in the path being traversed to detect whether the properties match; and
if the properties do not match, creating nodes in a node tree representative of the
parent/child relationship for the nodes having properties that do not match the
nodes in the node tree.

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15. The computer readable medium of claim 14 wherein the computer process further comprises:

resetting a pointer from pointing to the current end node to pointing to the new end node
whereby the new end node becomes the current end node for the next path of the
5 record being traversed.

16. The computer readable medium of claim 15, wherein the computer process further comprises:

testing for more records in the XML list; and

10 and if there are more records, repeating the acts of claim 15 to create a branch in the node
tree for each record.

17. The computer readable medium of claim 16, wherein the computer process further comprises:

15 building an XML payload from the node tree; and

exporting the XML payload as a web component to a web page.

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